IN THE CLAIMS:

Please amend claims 15, 23, 31, 39 and 47 to 55 as follows:

15. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining substantially minimizes a time required for said network cache to retrieve a network object from said cache memory.

23. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining includes steps of optimizing in said mass storage (a) spatial locality of storage of network objects within said mass storage, and (b) temporal locality of retrieval of said network objects from said mass storage.

31. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining includes steps of determining when and where on said mass storage to record said network objects so as to improve efficiency of maintaining or serving said network objects.

39. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining includes steps of recording said network objects in said cache memory and retrieving said network objects from said cache memory, so as to perform at least one of:

minimizing a rate at which said network objects can be written to said mass storage,

maximizing a rate at which said network objects can be erased from said mass storage,

maximizing a rate at which said network objects can be retrieved from said mass storage, or

minimizing a time required for retrieving said network objects from said mass storage.

47. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining is performed independently of a file system for said mass storage.

48. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining includes steps of selecting a group of more than one said network objects to be written to said mass storage collectively, and writing said group of network objects to said mass storage in one or more write episodes.

49. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining includes steps of writing a group of network objects to said mass storage in one or more write episodes, such that efficiency of maintaining or serving said network objects is improved.

50. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining includes steps of selecting a group of more than one of said network objects to be deleted from said mass storage collectively, and deleting said group of network objects to said mass storage in one or more delete episodes.

51. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining includes steps of deleting a group of network objects from said mass storage in one or more delete episodes, such that efficiency of maintaining or serving said network objects is improved.

52. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said cache memory utilizes non-hierarchical storage.

53. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining includes steps of recording said network objects in said memory and retrieving said network objects from said memory, without having to maintain said network objects persistently.

54. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining includes a step of writing a group of network objects to said mass storage in one or more write episodes, such that said write episodes are performed so as to atomically commit changes to said mass storage during each said write episode by writing modified data and control blocks to the mass storage without erasing corresponding unmodified data and control blocks and then replacing a root node so as to atomically commit the changes.

55. (Twice Amended) A method, including steps of:

receiving a set of network objects in response to a first request to a server from a client; and

maintaining said network objects in a cache memory in a [network] cache engine, said cache engine connected via a network to the server and the client, said cache memory including mass storage;

wherein said step of maintaining includes a step of deleting a group of network objects to said mass storage in one or more delete episodes, such that said delete episodes are performed so as to atomically commit changes to said mass storage during each said delete episode by writing modified control blocks to the mass storage without erasing corresponding